



## SEQUENCE LISTING

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HOSOYAMADA, Makoto

<120> ORGANIC ANION TRANSPORTER AND GENE  
CODING FOR THE SAME

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<140> 09/424,347

<141> 2000-07-18

<150> PCT/JP98/02171

<151> 1998-05-18

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<170> FastSEQ for Windows Version 3.0

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<222> (268)...(1956)

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Leu Pro Leu Leu Leu Met Ala Ser His Asn Thr Leu Gln Asn Phe Thr  
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gct gcc atc cct acc cac cac tgc cgc ccg cct gcc gat gcc aac ctc 438  
Ala Ala Ile Pro Thr His His Cys Arg Pro Pro Ala Asp Ala Asn Leu  
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Ser Lys Asn Gly Gly Leu Glu Val Trp Leu Pro Arg Asp Arg Gln Gly  
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acc gat ggc tgg atc tat gac aac agc acc ttc cca tct acc atc gtg Thr Asp Gly Trp Ile Tyr Asp Asn Ser Thr Phe Pro Ser Thr Ile Val 110 115 120	630
act gag tgg gac ctt gtg tgc tct cac agg gcc cta cgc cag ctg gcc Thr Glu Trp Asp Leu Val Cys Ser His Arg Ala Leu Arg Gln Leu Ala 125 130 135	678
cag tcc ttg tac atg gtg ggg gtg ctg ctc gga gcc atg gtg ttc ggc Gln Ser Leu Tyr Met Val Gly Val Leu Leu Gly Ala Met Val Phe Gly 140 145 150	726
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cag ttc ctc ctg gct ggt gtg gcc tac gct gtg ccc cac tgg cgc cac Gln Phe Leu Leu Ala Gly Val Ala Tyr Ala Val Pro His Trp Arg His 235 240 245	1014
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tgg ttc ttc att gag tcg gcc cgc tgg cac tcc tcc tcc ggg agg ctg Trp Phe Phe Ile Glu Ser Ala Arg Trp His Ser Ser Ser Gly Arg Leu 270 275 280	1110
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cgg gaa gaa gga gcc aaa ttg agt atg gag gta ctc cgg gcc agt ctg	1206

Arg Glu Glu Gly Ala Lys Leu Ser Met Glu Val Leu Arg Ala Ser Leu	
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Leu Arg Cys Pro Thr Leu Arg His Leu Phe Leu Cys Leu Ser Met Leu	
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Trp Phe Ala Thr Ser Phe Ala Tyr Tyr Gly Leu Val Met Asp Leu Gln	
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Gly Phe Gly Val Ser Ile Tyr Leu Ile Gln Val Ile Phe Gly Ala Val	
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Asp Leu Pro Ala Lys Leu Val Gly Phe Leu Val Ile Asn Ser Leu Gly	
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Arg Arg Pro Ala Gln Met Ala Ala Leu Leu Leu Ala Gly Ile Cys Ile	
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Leu Ala Val Leu Gly Lys Gly Cys Leu Ala Ala Ser Phe Asn Cys Ile	
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Phe Leu Tyr Thr Gly Glu Leu Tyr Pro Thr Met Ile Arg Gln Thr Gly	
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Met Gly Met Gly Ser Thr Met Ala Arg Val Gly Ser Ile Val Ser Pro	
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Tyr Gly Ala Val Pro Val Ala Ala Ser Ala Val Thr Val Leu Leu Pro	
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Arg Trp Ala Pro Thr Gln Lys Glu Ala Gly Ile Tyr Pro Arg Lys Gly	

525

530

535

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 540 545 550

cag gcc tca gca caa gag aag aat gga ctc tgaggactga gaaggggcct 1976  
 Gln Ala Ser Ala Gln Glu Lys Asn Gly Leu  
 555 560

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 Ser His Asn Thr Leu Gln Asn Phe Thr Ala Ala Ile Pro Thr His His  
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 Cys Arg Pro Pro Ala Asp Ala Asn Leu Ser Lys Asn Gly Gly Leu Glu  
 50 55 60  
 Val Trp Leu Pro Arg Asp Arg Gln Gly Gln Pro Glu Ser Cys Leu Arg  
 65 70 75 80  
 Phe Thr Ser Pro Gln Trp Gly Leu Pro Phe Leu Asn Gly Thr Glu Ala  
 85 90 95  
 Asn Gly Thr Gly Ala Thr Glu Pro Cys Thr Asp Gly Trp Ile Tyr Asp  
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 180 185 190  
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 Leu Ile Gly Tyr Val Tyr Ser Leu Gly Gln Phe Leu Leu Ala Gly Val  
 225 230 235 240  
 Ala Tyr Ala Val Pro His Trp Arg His Leu Gln Leu Leu Val Ser Ala  
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 Pro Phe Phe Ala Phe Phe Ile Tyr Ser Trp Phe Phe Ile Glu Ser Ala  
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 Arg Trp His Ser Ser Ser Gly Arg Leu Asp Leu Thr Leu Arg Ala Leu  
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Gln Arg Val Ala Arg Ile Asn Gly Lys Arg Glu Glu Gly Ala Lys Leu  
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 Ser Met Glu Val Leu Arg Ala Ser Leu Gln Lys Glu Leu Thr Met Gly  
 305 310 315 320  
 Lys Gly Gln Ala Ser Ala Met Glu Leu Leu Arg Cys Pro Thr Leu Arg  
 325 330 335  
 His Leu Phe Leu Cys Leu Ser Met Leu Trp Phe Ala Thr Ser Phe Ala  
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 370 375 380  
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 Ala Leu Leu Leu Ala Gly Ile Cys Ile Leu Leu Asn Gly Val Ile Pro  
 405 410 415  
 Gln Asp Gln Ser Ile Val Arg Thr Ser Leu Ala Val Leu Gly Lys Gly  
 420 425 430  
 Cys Leu Ala Ala Ser Phe Asn Cys Ile Phe Leu Tyr Thr Gly Glu Leu  
 435 440 445  
 Tyr Pro Thr Met Ile Arg Gln Thr Gly Met Gly Met Gly Ser Thr Met  
 450 455 460  
 Ala Arg Val Gly Ser Ile Val Ser Pro Leu Val Ser Met Thr Ala Glu  
 465 470 475 480  
 Leu Tyr Pro Ser Met Pro Leu Phe Ile Tyr Gly Ala Val Pro Val Ala  
 485 490 495  
 Ala Ser Ala Val Thr Val Leu Leu Pro Glu Thr Leu Gly Gln Pro Leu  
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 Pro Asp Thr Val Gln Asp Leu Glu Ser Arg Trp Ala Pro Thr Gln Lys  
 515 520 525  
 Glu Ala Gly Ile Tyr Pro Arg Lys Gly Lys Gln Thr Arg Gln Gln Gln  
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 ccagcgaagg acagcaggca ggcagacaga cagaggtcct gggactggaa ggcctcagcc 240  
 cccagccact gggctgggccc tggccca atg gcc ttt aat gac ctc ctg cag cag 294  
 Met Ala Phe Asn Asp Leu Leu Gln Gln  
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 Val Gly Gly Val Gly Arg Phe Gln Gln Ile Gln Val Thr Leu Val Val

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Leu Pro Leu Leu Leu Met Ala Ser His Asn Thr Leu Gln Asn Phe Thr				
30	35	40		
gct gcc atc cct acc cac cac tgc cgc ccg cct gcc gat gcc aac ctc				438
Ala Ala Ile Pro Thr His His Cys Arg Pro Pro Ala Asp Ala Asn Leu				
45	50	55		
agc aag aac ggg ggg ctg gag gtc tgg ctg ccc cgg gac agg cag ggg				486
Ser Lys Asn Gly Gly Leu Glu Val Trp Leu Pro Arg Asp Arg Gln Gly				
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Gln Pro Glu Ser Cys Leu Arg Phe Thr Ser Pro Gln Trp Gly Leu Pro				
75	80	85		
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Phe Leu Asn Gly Thr Glu Ala Asn Gly Thr Gly Ala Thr Glu Pro Cys				
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Thr Asp Gly Trp Ile Tyr Asp Asn Ser Thr Phe Pro Ser Thr Ile Val				
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Thr Glu Trp Asp Leu Val Cys Ser His Arg Ala Leu Arg Gln Leu Ala				
125	130	135		
cag tcc ttg tac atg gtg ggg gtg ctg ctc gga gcc atg gtg ttc ggc				726
Gln Ser Leu Tyr Met Val Gly Val Leu Leu Gly Ala Met Val Phe Gly				
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tac ctt gca gac agg cta ggc cgc cgg aag gta ctc atc ttg aac tac				774
Tyr Leu Ala Asp Arg Leu Gly Arg Arg Lys Val Leu Ile Leu Asn Tyr				
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Leu Gln Thr Ala Val Ser Gly Thr Cys Ala Ala Phe Ala Pro Asn Phe				
170	175	180	185	
ccc atc tac tgc gcc ttc cgg ctc ctc tgc ggc atg gct ctg gct ggc				870
Pro Ile Tyr Cys Ala Phe Arg Leu Leu Ser Gly Met Ala Leu Ala Gly				
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atc tcc ctc aac tgc atg aca ctg aat gtg gag tgg atg ccc att cac				918
Ile Ser Leu Asn Cys Met Thr Leu Asn Val Glu Trp Met Pro Ile His				
205	210	215		
aca cgg gcc tgc gtg ggc acc ttg att ggc tat gtc tac agc ctg ggc				966
Thr Arg Ala Cys Val Gly Thr Leu Ile Gly Tyr Val Tyr Ser Leu Gly				
220	225	230		
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Gln Phe Leu Leu Ala Gly Val Ala Tyr Ala Val Pro His Trp Arg His				
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cgg gaa gaa gga gcc aaa ttg agt atg gag gta ctc cgg gcc agt ctg Arg Glu Glu Gly Ala Lys Leu Ser Met Glu Val Leu Arg Ala Ser Leu 300 305 310	1206
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ctg gtg agc atg act gcc gag ctc tac ccc tcc atg cct ctc ttc atc	1734
Leu Val Ser Met Thr Ala Glu Leu Tyr Pro Ser Met Pro Leu Phe Ile	
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Tyr Gly Ala Val Pro Val Ala Ala Ser Ala Val Thr Val Leu Leu Pro	
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Glu Thr Leu Gly Gln Pro Leu Pro Asp Thr Val Gln Asp Leu Glu Ser	
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Lys Gln Thr Arg Gln Gln Gln Glu His Gln Lys Tyr Met Val Pro Leu	
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Cys Arg Pro Pro Ala Asp Ala Asn Leu Ser Lys Asn Gly Gly Leu Glu	60
50 55	
Val Trp Leu Pro Arg Asp Arg Gln Gly Gln Pro Glu Ser Cys Leu Arg	80
65 70 75	
Phe Thr Ser Pro Gln Trp Gly Leu Pro Phe Leu Asn Gly Thr Glu Ala	95
85 90	
Asn Gly Thr Gly Ala Thr Glu Pro Cys Thr Asp Gly Trp Ile Tyr Asp	110
100 105	
Asn Ser Thr Phe Pro Ser Thr Ile Val Thr Glu Trp Asp Leu Val Cys	125
115 120	
Ser His Arg Ala Leu Arg Gln Leu Ala Gln Ser Leu Tyr Met Val Gly	140
130 135	
Val Leu Leu Gly Ala Met Val Phe Gly Tyr Leu Ala Asp Arg Leu Gly	160
145 150 155	
Arg Arg Lys Val Leu Ile Leu Asn Tyr Leu Gln Thr Ala Val Ser Gly	175
165 170	



Thr Cys Ala Ala Phe Ala Pro Asn Phe Pro Ile Tyr Cys Ala Phe Arg  
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 Arg Trp His Ser Ser Ser Gly Arg Leu Asp Leu Thr Leu Arg Ala Leu  
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 Ser Met Glu Val Leu Arg Ala Ser Leu Gln Lys Glu Leu Thr Met Gly  
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